

PN - RO90071 A 19860830
 TI - PROCEDE DE RECUPERATION DU PALLADIUM DE L'ARGENT ET DU CUIVRE DE DECHETS D'ALLIAGES
 PA - INST DE CHIMIE (RO)
 IN - PERTE EUGENIA/CEUCA OLGA; CRUCINOVIDIUGHIARA COSMINA/MARC MARIA; PACURARU LUCIA
 AP - RO19840115666 19840907
 PR - RO19840115666 19840907
 DT - I

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AN - 1987-048121 [07]
 TI - Palladium, silver and copper recovery from alloy waste - by cementing nitrate soln. with metallic copper, pptn. and recovery of silver and palladium and treatment of copper nitrate
 AB - RO-90071 Highly pure Pd and Ag are sep'd. quantitatively by the cementation, using metallic Cu, of the nitrate solns. obt'd. by the repeated dissolution of the waste with HNO₃ 1:1, concn. and setting to pH 1-1.5. The ppt., formed of Ag and Pd black, is filtered, washed and dissolved, in conc. HNO₃. The nitrate soln. obt'd. is diluted with twice-distilled water and heated. Dil. HCl is added to ppt. The Ag chloride, which is cooled, filtered, washed and reduced with hydrazine hydrate in the presence of NaOH. The pptd. Ag is filtered, washed free from chloride, re-dissolved in conc. HNO₃ and diluted with water. Ag chloride is re-pptd. and reduced to Ag, washed with twice-distilled water, dried, fused and cast in water to form Ag granules. The filtrate from Ag sepn., contg. Pd and common elements, is evaporated to a viscous mass, converted to chlorides by treating with HCl dissolved in twice-distilled water and set to pH 1-1.5. The soln. formed is passed over an ion exchanger column filled with strongly acidic cationite, in proton form, to retain the common elements. The Pd-contg. effluent is evaporated to a viscous mass, diluted with twice-distilled water, and Pd is pptd. with hydrazine hydrate in the presence of 30% NaOH, at pH 8-9. The Pd black obt'd. is filtered, washed, dried and calcined in A. Highly pure Pd sponge is obt'd..S After filtering the ppt. of Ag and Pd from cementation, the Cu nitrate soln. is conc. treated with conc. H₂SO₄, evaporated to min. vol. until blue crystals appear, cooled with mixing, filtered, washed, dried in vacuo. CuSO₄.5H₂O is obt'd.. Alternatively, the Cu nitrate soln. from filtration is evaporated to a viscous mass to eliminate excess HNO₃, diluted and admixed with hydrazine hydrate. Cu is pptd. in the presence of 30% NaOH. The ppt. is filtered, washed, dried and introduced to the cementation process.
 IW - PALLADIUM SILVER COPPER RECOVER ALLOY WASTE CEMENTED NITRATE SOLUTION METALLIC COPPER PRECIPITATION
 RECOVER SILVER PALLADIUM TREAT COPPER NITRATE
 PN - RO90071 A 19860830 DW198707 000pp
 IC - C22611/04
 MC - M25-801 M25-E M25-G08 M25-G20
 DC - M25
 PA - (CHCL-N) INST CHIM CLUJ-NAPO
 IN - .-CEUCA O; CRUSCIN O; GHIAI C; MARC M; PERTE E
 AP - RO19840115666 19840907
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